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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/529,484

09/28/2005

Lennart Alfredeen

1505-1071

6761

466

7590

03/07/2006

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EXAMINER

LEUNG, PHILIP H

ART UNIT

PAPER NUMBER

3742

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/529,484

Applicant(s)

ALFREDEEN, LENNART

Examiner

Philip H. Leung

Art Unit

3742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3-28-2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The use of Induction Heating should be reflected in the title.
2. The drawings filed 3-28-2005 are acceptable.
3. The abstract of the disclosure is objected to because legal phraseology, such as “means” and “said” should not be used. Correction is required. See MPEP § 608.01(b).
4. The priority claim on the BIB data sheet that claims the benefit of US application Serial No. 09/548,385 filed 04/11/2000 appears to be in error. According to the Application Data Sheet filed by the applicant, the priority claim is based on EP 02102386.6 filed 9/26/02 instead. Therefore, the data will be corrected as such. However, a certified copy of the priority papers has not been filed.
5. In claim 15, the clause “i.e. they are not fastened (fixed) to each other” is objectionable as it is not clear if this is a positive limitation or not. Clarification and correction are required.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-20 are further rejected under 35 U.S.C. 103(a) as being obvious over Iguchi (US 5,053,593) or Gibbs (GB 1,157,711) (both cited by the applicant), in view of Seguy et al (US 4,792,652) or McGaffigan et al (US 5,376,774).

Iguchi shows a frying hob arrangement comprising a planar heating means (1) including a ferromagnetic material and constituting a frying surface, said arrangement comprises at least two magnetic field generators (plural coils 2 each with a core 3) each having two free ends (as shown in Figures 2, 7 and 11), wherein said heating means is arranged in or close to a plane defined by said free ends, said magnetic field generators are controlled by a control means (col. 7, lines 1-7) such that they are adapted to generate alternating magnetic fields in said planar heating means, wherein the magnetic fields are converted into heat in said heating means (see Figures 1-12 and col. 3, line 57 – col. 8, line 13). Gibbs also shows a frying hob arrangement comprising a planar heating means (17) including a ferromagnetic material and constituting a frying surface, said arrangement comprises at least two magnetic field generators (windings 43, 44, 45 each on poles 40, 41 and 42) each having two free ends (as shown in the Figures), wherein said heating means is arranged in or close to a plane defined by said free ends, said magnetic field generators are controlled by a control means (page 2, lines 103-108) such that they are adapted to generate alternating magnetic fields in said planar heating means, wherein the

Art Unit: 3742

magnetic fields are converted into heat in said heating means (see Figures 1-8 and page 2, line 80 – page 3, line 92). Therefore, Iguchi or Gibbs shows every feature as claimed except for the showing of the magnetic fields being such that the magnetic field through one of said free ends has an opposed direction as compared to the magnetic fields through the other free ends. Seguy shows an induction cooking device for heating a heating element C with magnetic fields generated by induction coils (4, 5; 15-18; 21,22). The coils provide magnetic fields equal in absolute value but in opposite directions in order to reduce harmonic emission (see Figures 1-7 and col. 2, lines 4-66). McGaffigan also shows an induction cooking device for heating a cooking griddle 60 with magnetic fields generated by induction coils (64, 66, 68, 70). The coils provide magnetic fields in opposite directions in order to reduce radiations from the coils outside the heating device (see Figures 6-8, col. 1, lines 14-19 and col. 5, lines 1-57). It would have been obvious to an ordinary skill in the art at the time of invention to modify Iguchi or Gibbs to control the power to the induction heating coils so that the magnetic fields are in opposed directions to reduce radiation leakages for a safer device with less interferences to other appliances, in view of the teaching of Seguy or McGaffigan. In regard to claims 9 and 20, Seguy shows the claimed frequency. In regard to claims 13-16, Gibbs shows the use of a heating element with multi-layers formed of ferromagnetic and paramagnetic materials to control the heating to be well known in the art of induction cooking (see page 2, line 80 – page 3, line 24 and lines 56-82). The exact arrangement would have been a matter of obvious engineering variations of the various embodiments disclosed in these references.

Art Unit: 3742


8. Claims 12 is rejected under 35 U.S.C. 103(a) as being obvious over Iguchi (US 5,053,593) or Gibbs (GB 1,157,711) (both cited by the applicant), in view of Seguy et al (US 4,792,652) or McGaffigan et al (US 5,376,774), as applied to claims 1-11 and 13-20 above, and further in view of Dickens (US 5,134,265).

Iguchi or Gibbs combined with Seguy or McGaffigan shows a frying hob having every feature as claimed except for the use of a temperature sensor. Dickens shows it is routine in the art of induction heating griddle to use a temperature sensor to monitor the temperature of the griddle to control the heating temperature (see Figures 1 and 7 and col. 6, lines 53-61). It would have been obvious to an ordinary skill in the art at the time of invention to further modify Iguchi or Gibbs to use a temperature sensor to monitor the heating process to feedback control the power for better heating control and result, in view of the teaching of Dickens.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip H Leung whose telephone number is (571) 272-4782.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on (571) 472-4777. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Philip H Leung
Primary Examiner
Art Unit 3742

P.Leung/pl
2-28-2006